Page 1-A

Page 3-A

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VAR G1=10/37/65/70
VAR G2=83/89/93/98/101/107/113/120/84
NODE ATTRIBUTES:
NSPEC IS RC
                  AT 119
NSPEC
       IS RC
                  AT 125
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
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GRAPH ATTRIBUTES: RSPEC I

NUMBER OF NODES IS 117

STEREO ATTRIBUTES: NONE

T. 4 33354 SEA FILE=REGISTRY SSS FUL L3 L5 STR

86 t-Bu @83 089

108

CH2-CH2-O-CH2-CH3

@101 ~103 @107

G2 112

G2 126 G2 127 122 124

111

VAR G2=83/89/93/98/101/107/113/120/84

NODE ATTRIBUTES:

NSPEC IS RC AT 119

NSPEC IS RC AT 125 DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC I

NUMBER OF NODES IS 60

STEREO ATTRIBUTES: NONE

L7 52 SEA FILE=REGISTRY SUB=L4 SSS FUL L5 L8 319 SEA FILE=REGISTRY ABB=ON PLU=ON C13H10/MF 570 SEA FILE=REGISTRY ABB=ON PLU=ON C15H14/MF L9 L10 129991 SEA FILE-REGISTRY ABB-ON PLU-ON 1839.6/RID 74 SEA FILE-REGISTRY ABB-ON PLU-ON (L8 OR L9) AND L10 L12 4 SEA FILE=REGISTRY ABB=ON PLU=ON L11 AND 9,9-DIMETHYL? L13 3 SEA FILE=REGISTRY ABB=ON PLU=ON L12 NOT T/ELS L18 1 SEA FILE=REGISTRY ABB=ON PLU=ON FLUORENE/CN L20 37 SEA FILE-HCAPLUS ABB-ON PLU-ON L7 L23 873 SEA FILE=REGISTRY ABB=ON PLU=ON C13H10O3/MF L24 6 SEA FILE=REGISTRY ABB=ON PLU=ON L23 AND L10

10/531,208

L25	1	SEA FILE=REGISTRY ABB=ON PLU=ON L24 AND 9H-FLUORENETRIOL
L26	1	SEA FILE=REGISTRY ABB=ON PLU=ON L13 NOT RADICAL?
L27	13783	SEA FILE-HCAPLUS ABB-ON PLU-ON L26 OR L25 OR L18
L28	27	SEA FILE=HCAPLUS ABB=ON PLU=ON L27 AND (PHOTORESIST? OR
		PHOTO RESIST? OR LIGHTRESIST? OR LIGHT RESIST?)
L29	14	SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND PHOTOG?/SC,SX
L31	7	SEA FILE=HCAPLUS ABB=ON PLU=ON L20 AND PHOTOG?/SC,SX
L36	12	SEA FILE=REGISTRY ABB=ON PLU=ON L7 NOT N/ELS
L37	10	SEA FILE=HCAPLUS ABB=ON PLU=ON L36
L38	2	SEA FILE=HCAPLUS ABB=ON PLU=ON L37 AND L31
L39	24	SEA FILE=HCAPLUS ABB=ON PLU=ON L29 OR L37
L40	24	SEA FILE=HCAPLUS ABB=ON PLU=ON L38 OR L39

=> D L40 1-24 IBIB ED ABS HITSTR HITIND

L40 ANSWER 1 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:1276428 HCAPLUS Full-text DOCUMENT NUMBER: 149:481924

TITLE: Biphenyl derivatives and organic

electroluminescent devices therewith showing high

efficiency and luminescent intensity INVENTOR(S): Abe, Shigemoto; Senoo, Akihiro; Kamatani, Atsushi;

Igawa, Satoshi; Yamada, Naoki

Canon Inc., Japan Jpn. Kokai Tokkyo Koho, 28pp. PATENT ASSIGNEE(S):

SOURCE: CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008255074	A	20081023	JP 2007-101489	20070409
PRIORITY APPLN. INFO.:			JP 2007-101489	20070409

ED Entered STN: 23 Oct 2008 GI

AB Biphenyl derivs. I [R1, R2, R4-R6, R8, R10 = H, (aryl)alkyl, alkenyl, alkynyl, alkoxy; R3, R7 = H, alkyl, aryl, heterocycle; X1, X2 = CRIRI2, NRI1 (R11, R12 = H, alkyl, aralkyl, aryl, heterocycle; halol), and organic LED containing the same in host-guest-type emitting layers are sep. claimed. Thus, II (I; R1, R2, R4-R6, R8, R10 = H; X1, X2 = CMe2; R3, R7 = 9,9-dimethylfluoren-2-yl) was prepared from 3,75,57-tetrabromobiphenyl and

2-(4,4,5,5-tetramethyl-1,3-2-dioxaborolan-2-yl)-9,9-dimethyl-9H- fluorene in the presence of Pd(PPh3)4 in 25.4% yield. An organic LED containing II and tris(2-phenylpyridine)iridium in a host-guest-type emitting layer was fabricated.

IT 1071808-04-2

(fluorenyl- or carbazolyl-substituted biphenyl derivs. giving organic electroluminescent devices with high intensity and efficiency)

RN 1071808-04-2 HCAPLUS

CN INDEX NAME NOT YET ASSIGNED

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 25

тт 1071808-04-2 1071808-05-3 1071808-06-4 1071808-09-7

(fluorenyl- or carbazolyl-substituted biphenyl derivs. giving organic electroluminescent devices with high intensity and efficiency)

L40 ANSWER 2 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:1127993 HCAPLUS Full-text

DOCUMENT NUMBER: 149:366002

TITLE: Fused ring aromatic compound and organic

light-emitting devices using the aromatic compound

as emitting dopant

INVENTOR(S): Igawa, Satoshi; Hashimoto, Masashi; Okada, Shinjiro; Takiquchi, Takao; Okinaka, Keiji

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan PCT Int. Appl., 67pp.

SOURCE:

CODEN: PIXXD2 DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PAT	PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
WO					A1	_	2008	0918		WO 2					2	0080303	
	W:	ΑE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	
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		EG,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	
		IS,	KE,	KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	
		LY,	MA,	MD,	ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	
		NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	
		SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	
		ZA,	ZM,	ZW													
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		HU,	ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	NO,	PL,	PT,	RO,	SE,	
		SI,	SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	
		NE,	SN,	TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	
		TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM			
JP	JP 2008255095				A	A 20081023			3 JP 2008-23231					20080201			
RITY	RITY APPLN. INFO.:									JP 2007-60609					A 20070309		

PRIO

JP 2008-23231 A 20080201

ED Entered STN: 19 Sep 2008 GT

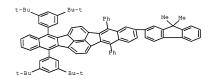
R15

т

- AB There are provided a novel fused ring aromatic compound represented by the general formula (I) and an organic light-emitting device which has an optical output with extremely high efficiency and luminance, and also has extremely high durability; where R1-16 each represent, independently of one another, a hydrogen atom, an alkyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group, a substituted or unsubstituted heterocyclic group, a substituted amino group, or a halogen atom; provided that at least one of combinations of R1 and R9, R2 and R10, R3 and R11, R4 and R12, R5 and R13, R6 and R14, R7 and R15, and R8 and R16, is a combination of different substituents.
- 1058142-67-8P

(fused ring aromatic compound and organic green-emitting devices using the aromatic compound as emitting dopant)

- 1058142-67-8 HCAPLUS RN
- CN INDEX NAME NOT YET ASSIGNED



73-11 (Optical, Electron, and Mass Spectroscopy and Other Related

Properties)

Section cross-reference(s): 25, 76

1058142-67-89

(fused ring aromatic compound and organic green-emitting devices using the aromatic compound as emitting dopant)

REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR

THIS RECORD, ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L40 ANSWER 3 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN 2008:619943 HCAPLUS Full-text ACCESSION NUMBER:

DOCUMENT NUMBER: 148:596158

TITLE: Pyrene compound and organic light emitting device

INVENTOR(S): Suzuki, Koichi; Yamada, Naoki; Ueno, Kazunori PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

SOURCE: U.S. Pat. Appl. Publ., 25pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent.

LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 20080119671	A1	20080522	US 2007-937115	20071108		
JP 2008127291	A	20080605	JP 2006-310898	20061117		
PRIORITY APPLN. INFO.:			JP 2006-310898 A	20061117		

OTHER SOURCE(S): CASREACT 148:596158

ED Entered STN: 23 May 2008

GI

AB The title pyrene compds. are described by the general formula I (R1 and R2 = independently selected (un) substituted alkyl; and Ar1-4 = independently selected (un) substituted aryl, (un) substituted heterocyclic, (un) substituted condensed polycyclic aromatic, and (un) substituted condensed polycyclic heterocyclic). Organic light-emitting devices with layers including the compds., inks containing the compds. (which are suitable for forming the layers), and display devices employing the light-emitting devices are also described.

IT 1027059-55-7

(pyrene derivs. and organic light-emitting devices and inks containing them and display devices using the light-emitting devices)

RN 1027059-55-7 HCAPLUS

CN Pyrene, 2,7-bis(1,1-dimethylethyl)-4,5,9,10-tetrakis[7-(1,1-dimethylethyl)-9,9-dimethyl-9H-fluoren-2-yl]- (CA INDEX NAME)

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INCL 564308000; 313504000; 564307000; 585027000

CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 25, 74, 76

 IT
 1027059-55-7
 1027059-56-8
 1027059-57-9
 1027059-58-0

 1027059-62-6
 1027059-64-8
 1027059-65-9
 1027059-69-3

 1027059-70-6
 1027059-74-0
 1027059-77-3
 1027059-81-9

 1027059-93-1
 1027059-85-3
 1027059-87-5
 1027059-89-7

 1027059-90-0
 1027059-91-1
 1027059-33-3
 1027059-96-6

 1027059-98-8
 1027211-56-8
 1027211-57-9

(pyrene derivs. and organic light-emitting devices and inks containing them and display devices using the light-emitting devices)

L40 ANSWER 4 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:546174 HCAPLUS Full-text

DOCUMENT NUMBER: 149:115130

TITLE: Improving the Luminance Properties of BGOLED by

Using Hole Blocking and Energy Transfer
AUTHOR(S): Yang, Su-Hua; Chang, Wen-Kai; Hong, Bo-Cheng;

Huang, Xian-Bi

CORPORATE SOURCE: Department of Electronic Engineering, National

Kaohsiung University of Applied Sciences,

Kaohsiung, Taiwan
SOURCE: Journal of the Electrochemical Society (2008),

155(6), J161-J164

20000, 0101 0101

CODEN: JESOAN; ISSN: 0013-4651
PUBLISHER: Electrochemical Society

Electrochemical Society
Journal

DOCUMENT TYPE: Journal LANGUAGE: English

ED Entered STN: 07 May 2008

A high-luminance blue-green organic light-emitting diode (BGOLED) based on a single LT-N421:C6 [3-(2-Benzothiazoly1)-7-(diethylamino)coumarin] emitting layer along with a 4.4'-bis(2,2-diphenyl-ethen-1-y1)-diphenyl (DPVB1) hole-blocking layer was fabricated. The structure of the BGOLED was In Sn oxide/N, N'-di (naphthalene-1-y1)-N, N'-diphenyl-benzidine (NPB, 50 nm)/LT-N421C6 (32 nm)/DPVBi (8 nm)/tris-(8-hydroxy-quinolinato)-Al (Alq3, 20 nm)/LIF (1 nm)/Al (200 nm). The DPVBi layer inserted between the LT-N421C6 and Alq3 layers reduced the interface barrier for electron injection and blocked holes in the emitting layer to increase the electron-hole recombination. The electroluminescence of LT-N421 was quenched by C6 dopant and the exciton energy was efficiently transferred from LT-N421 to C6, which resulted in the blue-green C6 dominant emission. The optimum deposition rate ratio of C6 to LT-N421 was 0.4%. The maximum luminance was 42,400 cd/m2 at 11 V The current and power efficiencies were 8.83 cd/A at 11 V and 3.96 lm/W at 6 V, resp.

IT 1034543-32-2

(improving the luminance properties of BGOLED by using hole blocking and energy transfer)

RN 1034543-32-2 HCAPLUS

9H-Fluorene, 3,6-bis[2,2-bis[4-(1,1-dimethylethyl)phenyl]ethenyl]-9,9-CN dimethyl- (CA INDEX NAME)

73-11 (Optical, Electron, and Mass Spectroscopy and Other Related CC Properties)

2085-33-8, Aluminum tris(8-hydroxyquinolinato) 38215-36-0, Coumarin 123847-85-8, NPB 142289-08-5, DPVBi 1034543-32-2

(improving the luminance properties of BGOLED by using hole

blocking and energy transfer)

THERE ARE 14 CITED REFERENCES AVAILABLE FOR REFERENCE COUNT: 14 THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 5 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2008:159511 HCAPLUS Full-text

DOCUMENT NUMBER: 148:249688

TITLE . Fused heterocyclic compounds and organic

light-emitting devices using them

INVENTOR(S): Ohrui, Hiroki; Okada, Shinjiro; Senoo, Akihiro;

Yamada, Naoki; Muratsubaki, Masanori

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 210pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA:	TENT :	NO.			KIND I		DATE			APPL:	ICAT	ION :	NO.		DATE		
	2008				A1		20080207			WO 2			328		20070731		
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,	
		CA,	CH,	CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	
		ES,	FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	
		KE,	KG,	KM,	KN,	KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	
		MA,	MD,	ME,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	
		OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	
		SV,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	
		ZM,	ZW														
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		IE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	
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		TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	
		ZM,	ZW,	AM,	AZ,	BY,	KG,	KZ,	MD,	RU,	TJ,	TM					

TP 2008056658 A 20080313 JP 2007-118218 20070427 PRIORITY APPLN. INFO .: JP 2006-213063 A 20060804

> JP 2007-118218 A 20070427

OTHER SOURCE(S): MARPAT 148:249688 Entered STN: 07 Feb 2008

AB Fused heterocyclic compound comprising ≥1 partial structure are described by the general formula I (X1-10 = independently selected CR or N; R = independently selected at each occurrence H, halo, (un) substituted alkyl, (un) substituted alkenyl, (un) substituted alkynyl, (un) substituted amino, (un) substituted aralkyl, (un) substituted aryl, (un) substituted heterocyclic, (un) substituted fused polycyclic aromatic, (un) substituted fused polycyclic heterocyclic, cyano, or a single bond with the restriction that ≥ 1 of X1-10 = N and adjacent Rs may form a ring structure; and R1-2 = IS halo, (un) substituted alkyl, (un) substituted alkenyl, (un) substituted alkynyl, (un) substituted amino, (un) substituted aralkyl, (un) substituted aryl, (un) substituted heterocyclic, (un) substituted fused polycyclic aromatic, (un) substituted fused polycyclic heterocyclic, cyano, or a single bond). Organic light-emitting devices are described which comprise an anode and a cathode, ≥1 of which is formed of a transparent or semitransparent electrode material with a layer containing a fused heterocyclic compound provided between them. Isonicotinonitrile. 1013653-08-1

ΤТ

CN

(fused heterocyclic compds. and organic light-emitting devices using them)

RN 1013653-08-1 HCAPLUS

> 1,3,2-Dioxaborolane, 2-[7,12-bis[2,7-bis(1,1-dimethylethyl)-9,9dimethyl-9H-fluoren-4-yl]benzo[k]fluoranthen-3-yl]-4,4,5,5-tetramethyl-(CA INDEX NAME)

CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 27, 28, 76

IT 98-98-6, Picolinic acid 1714-29-0 3029-19-4, 1-Pyrenecarboxaldehyde 4964-71-0 13438-50-1 28440-63-3, 3-Fluoranthenecarboxaldehyde 31462-59-6, 4-Pyrimidinecarboxylic acid 349666-24-6 863878-53-9 1013652-96-4 1013652-98-6 1013653-07-0 1013653-08-1

(fused heterocyclic compds. and organic light-emitting devices using them)

REFERENCE COUNT:

13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 6 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1274215 HCAPLUS Full-text

DOCUMENT NUMBER: 147:511314

TITLE: Fluoranthene derivative and organic light emitting

device having the same

INVENTOR(S): Hashimoto, Masashi; Saitoh, Akihito; Yamada,
Naoki; Iqawa, Satoshi; Kamatani, Jun; Takiquchi,

Takao: Okada, Shinjiro

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 51pp.

CODEN: PIXXD2 Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

DOCUMENT TYPE:

WO 20					KIN	D	DATE		- 1	APPL						ATE
		1261:					0071108 WO 20					351			0070424	
1	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
		CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,
		FI,	GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,
		KG,	KM,	KN,	KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,
		MD,	MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,
		PH,	PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,
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		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
		TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,

10/531,208

ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

JP 2007314510 A 20071206 JP 2007-42663 20070222
PRIORITY APPLN. INFO:: JP 2006-123783 A 20060427

JP 2007-42663 A 20070222

OTHER SOURCE(S): MARPAT 147:511314

ED Entered STN: 09 Nov 2007

GΙ

- AB A fluoranthene derivative represented by the following general formula I is described where RI-R10 are each independently selected from a hydrogen atom, a halogen atom, a substituted amino group, a linear or branched alkyl group and other groups shown in the text. An organic light emitting device comprising the fluoranthene derivative is also described.
 - T 955121-13-8P
 - (fluoranthene derivative and organic light emitting device having same)
- RN 955121-13-8 HCAPLUS
- CN Fluoranthene, 3,8-bis[2,7-bis(1,1-dimethylethyl)-9,9-dimethyl-9H-fluoren-4-yl]- (CA INDEX NAME)

- CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
- Section cross-reference(s): 25, 76
- IT 955121-13-3P

(fluoranthene derivative and organic light emitting device having same)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L40 ANSWER 7 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1145344 HCAPLUS Full-text

DOCUMENT NUMBER: 147:458511

TITLE: Novel compound and organic light emitting device

using the compound INVENTOR(S):

Igawa, Satoshi; Okada, Shinjiro; Kamatani, Jun; Yamada, Naoki: Hashimoto, Masashi: Okinaka, Keiji: Negishi, Chika; Saitoh, Akihito; Takiguchi, Takao

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

PCT Int. Appl., 104pp. SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.				KIND DATE											
					A1									20070313		
	W:	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,
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		GB,	GD,	GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	KE,	KG,
		KM,	KN,	KP,	KR,	ΚZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LY,	MA,	MD,
		MG,	MK,	MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,
		PL,	PT,	RO,	RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,
		TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW	
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,
		ΙE,	IS,	IT,	LT,	LU,	LV,	MC,	MT,	NL,	PL,	PT,	RO,	SE,	SI,	SK,
		TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,
		TD,	TG,	BW,	GH,	GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,
		ZM,	ZW,	AM,	ΑZ,	BY,	KG,	KΖ,	MD,	RU,	ΤJ,	TM				
JP	2007	2910	61		A		2007	1108		JP 2	006-	3349	85		2	0061212
RIT	APP	LN.	INFO	. :						JP 2	006-	9989	6	- 1	A 2	0060331

PRIO

JP 2006-334985 A 20061212

OTHER SOURCE(S): MARPAT 147:458511 Entered STN: 11 Oct 2007 ED GI

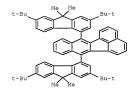
A mono(benzo[k]fluoranthene) compound represented by the general formula I, is AB described where R1-R12 each represent a hydrogen atom, a linear or branched alkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group, provided that at least one of R7, R8, and R9

represents a substituted or unsubstituted condensed ring aromatic group which is tricyclic or more. An organic light emitting device is also described comprising at least a pair of electrodes formed of an anode and a cathode, and an light emitting layer formed of an organic compound, the layer being interposed between the pair of electrodes, in which the layer formed of the organic compound 992111-67-2

(light emitting layer; benzofluoranthene derivative compound and organic light emitting device using the compound)

RN 952141-67-2 HCAPLUS

CN Benzo[k]fluoranthene, 7,12-bis[2,7-bis(1,1-dimethylethyl)-9,9-dimethyl-9H-fluoren-4-vl]- (CA INDEX NAME)



CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 24, 76

IT 952141-58-1 952141-59-2 952141-60-5 952141-61-6 952141-62-7 952141-63-8 952141-64-9 952141-65-0 952141-66-1

952141-67-2 952141-68-3 952141-69-4 952141-70-7 952141-71-8

(light emitting layer; benzofluoranthene derivative compound and organic light emitting device using the compound)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE

RE FORMAT

L40 ANSWER 8 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2007:1119993 HCAPLUS Full-text

DOCUMENT NUMBER: 147:436474
TITLE: Fluorene de

TITLE: Fluorene derivative and organic electroluminescent

device using the fluorene derivative in a

light-emitting layer

INVENTOR(S): Iqawa, Satoshi; Okada, Shinjiro; Takiquchi, Takao;

Hashimoto, Masashi; Yamada, Naoki

PATENT ASSIGNEE(S): Canon Kabushiki Kaisha, Japan

SOURCE: U.S. Pat. Appl. Publ., 33pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent LANGUAGE: English

LANGUAGE: Englis FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 20070232841	A1	20071004	US 2007-686002	20070314
JP 2007269736	A	20071018	JP 2006-99895	20060331
PRIORITY APPLN. INFO.:			JP 2006-99895 A	20060331

OTHER SOURCE(S): MARPAT 147:436474

ED Entered STN: 05 Oct 2007

GI

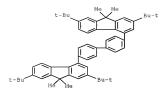
,

- AB Fluorene derivs. are described which are represented by the following structural formula (I), where R1 and R2 each independently represent a hydrogen atom, an alkyl group, a substituted or unsubstituted aralkyl group, a substituted or unsubstituted aryl group, or a substituted or unsubstituted heterocyclic group; R3 and R4 each represent a linear, branched, or cyclic substituted or unsubstituted alkyl group; a substituted or unsubstituted aryl group; or a halogen atom, provided that, when R3 and R4 are each present in plurality, R3's may be identical to or different from each other, and R4's may be identical to or different from each other; p and r represent integers of 0 to 4, and g represents an integer of 0 to 3; R5 represents a linear, branched, or cyclic substituted or unsubstituted alkyl group; a halogen atom; or a substituted or unsubstituted aryl group, provided that, when R5 is present in plurality, R5's may be identical to or different from each other; when the phenylene group is present in plurality, the substituents R5's of phenylene groups may be identical to or different from each other, and the substituents R6's of phenylene groups may be identical to or different from each other; n represents an integer of 1 to 10; and R6 represents a hydrogen atom, a substituted or unsubstituted arvl group, or a linear, branched, or cyclic alkyl group. Organic electroluminescent devices are described which comprise a pair of electrodes, and at least one layer containing an organic compound interposed between the pair of the electrodes and containing the fluorene derivative as a host in a light-emitting layer.
- IT 951400-23-0P

(fluorene derivative and organic electroluminescent device using the fluorene derivative as host in light-emitting layer)

RN 951400-23-0 HCAPLUS

CN 9H-Fluorene, 4,4'-[1,1'-biphenyl]-4,4'-diylbis[2,7-bis(1,1-dimethylethyl)-9,9-dimethyl- (CA INDEX NAME)



INCL -585; -428; -428; -313; -313; -257; 257-E51.049; 257-E51.044; 257-E51.041

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 22, 25, 76

IT 951400-23-0P

(fluorene derivative and organic electroluminescent device using the fluorene derivative as host in light-emitting layer)

L40 ANSWER 9 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:944672 HCAPLUS Full-text

DOCUMENT NUMBER: 145:345245

TITLE: Base multiplying agents and base-reactive curable

compositions

INVENTOR(S): Aoki, Kenichi; Ichimura, Kunihiro; Nagano, Motoi;

Fukui, Hiroji

PATENT ASSIGNEE(S): Sekisui Chemical Co., Ltd., Japan

SOURCE: PCT Int. Appl., 27pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. 20060914 WO 2006-JP304239 WO 2006095670 A1 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT. BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM 20061019 JP 2006282657 Α JP 2006-43517 20060221 JP 3884758 B2 20070221 DE 112006000540 T5 20080124 DE 2006-112006000540 A CN 2006-80007394 CN 101137620 20080305 20070907 KR 2007113218 A 20071128 KR 2007-720647 20070910

US 20080200580 A1 20080821 US 2007-885997 20070910
PRIORITY APPLN. INFO:: JP 2005-70011 A 20050311

JP 2006-43517 A 20060221

I

WO 2006-JP304239 W 20060306

OTHER SOURCE(S): MARPAT 145:345245

ED Entered STN: 14 Sep 2006

GI

- AB The invention relates to base-multiplying agents usable in crosslinking epoxy compds. and so on, which can react with a base to generate another base and which permit efficient progress of base multiplication reaction; and base-reactive curable compns. containing the same. The base-multiplying agents are represented by the general formula I: wherein X is hydrogen, substituted alkyl, or unsubstituted alkylene; Y is a substituted or unsubstituted alkyl chain; and n is an integer of 1 to 4.
- IT 86-73-7, Fluorene
 - (base multiplying agents)
- RN 86-73-7 HCAPLUS
- CN 9H-Fluorene (CA INDEX NAME)



- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- Section cross-reference(s): 23
- IT Photoresists
 - (base multiplying agents and base-reactive curable compns.)
- IT 50-00-0, Formaldehyde, reactions 86-73-7, Fluorene 10193-96-1 10193-99-4 13641-96-8, 2-Isocyanatoethyl acrylate 15646-96-5 16938-22-0, 2, 2, 4-Trimethylhexane 1,6-diisocyanate (base multiplying agents)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 10 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN 2006:564344 HCAPLUS Full-text

ACCESSION NUMBER:

DOCUMENT NUMBER: 145:53326

TITLE: Preparation of fluorenepolycarboxylic acid esters, photosensitive resin compositions containing them,

and pattern formation using it INVENTOR(S):

Murase, Hiroaki; Ogata, Kazuyuki; Miyauchi, Shinsuke; Kawasaki, Shinichi; Motokawa, Takuya

PATENT ASSIGNEE(S): Osaka Gas Co., Ltd., Japan

Jpn. Kokai Tokkyo Koho, 30 pp. SOURCE: CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2006151833 PRIORITY APPLN. INFO.:	A	20060615	JP 2004-341295 JP 2004-341295	20041125 20041125

OTHER SOURCE(S): MARPAT 145:53326

Entered STN: 15 Jun 2006 ED

$$(R^{1?})_k \xrightarrow{X} \xrightarrow{Y} (R^{1?})_n$$

$$(R^{3?02C})_j \xrightarrow{(C02R^3?)_m}$$

- AB The fluorene derivs. I [X = R2aCO2R3c; Y = R2bCO2R3d; R1a, R1b = substituent; R2a, R2b = hydrocarbylene, CH[(R5)pCO2R3e]CHR4 [R4 = H, hydrocarbyl; R5 = (un) substituted hydrocarbylene; p = 0, 1; R3e = H, carboxy-protecting group]; R3a-R3d = H, carboxy-protecting group; k, j, m, n = 0-4; j + k \leq 4; m + n = \leq 4; if i = m = 0, then R2a and/or R2b = CH[(R5)pCO2R3elCHR4] (II) are prepared by reacting I (X, Y = H; Rla, Rlb, j, k, m, n = same as above; R3a, R3b = carboxy-protecting group) with R6CO2R3 [R6 = R2X [R2 = (un)substituted hydrocarbylene; X = halo], CR7:CHR8 [R7, R8 = H, hydrocarbyl, (R5)pCO2R3 (R3, R5, p = same as above); R7 and/or R8 = H, hydrocarbyl]] in the presence of basic catalysts. The resin compns. contain II, base resins, and photosensitive agents. Addition of II, e.g. 9,9-bis(di-tert-Bu succinate)fluorene, improves sensitivity to and resolution of pos. photoresist.
- 96-73-7, Fluorene

(preparation of fluorenepolycarboxylic acid esters and photosensitive resin compns. containing them to improve sensitivity and resolution)

- RN 86-73-7 HCAPLUS
- CN 9H-Fluorene (CA INDEX NAME)



CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 25

Photoresists

(preparation of fluorenepolycarboxylic acid esters and photosensitive resin compns. containing them to improve sensitivity and resolution)

86-73-7, Fluorene 1663-39-4, tert-Butyl acrylate

18305-60-7, Di-tert-butvl maleate 890135-66-7

(preparation of fluorenepolycarboxylic acid esters and photosensitive resin compns. containing them to improve sensitivity and resolution)

L40 ANSWER 11 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2006:77306 HCAPLUS Full-text

DOCUMENT NUMBER: 144:180783

TITLE: Oxime derivatives and the use thereof as latent

INVENTOR(S):

Yamato, Hitoshi; Asakura, Toshikage; Hintermann, Tobias

PATENT ASSIGNEE(S):

Ciba Specialty Chemicals Holding Inc., Switz. PCT Int. Appl., 81 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE: LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

	PATENT NO.							APPLICATION NO.								
				-									-			
WO 20	0060082	50	A2		2006	0126		WO 2	005-1	EP53:	296		2	0050711		
WO 20	0060082	50	A3		2006	0413										
T/	W: AE,	AG, A	L, AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,		
	CH,	CN, C	O, CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,		
	GB,	GD, G	E, GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,		
	KP,	KR, K	Z, LC,	LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,		
	MW,	MX, M	Z, NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,		
	SC,	SD, S	E, SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT,	TZ,	UA,		
	UG,	US, U	z, vc,	VN,	YU,	ZA,	ZM,	ZW								
F	RW: AT,	BE, E	G, CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,		
	IE,	IS, I	T, LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,		
	BF,	BJ, C	F, CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,		
	TG,	BW, G	H, GM,	KE,	LS,	MW,	ΜZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,		
	ZW,	AM, A	Z, BY,	KG,	KZ,	MD,	RU,	ТJ,	TM							
CA 25	574054		A1		2006	0126		CA 2	005-	2574	054		2	0050711		
EP 1	769286		A2		2007	0404		EP 2	005-	7741	69		2	0050711		
F	R: AT,	BE, E	G, CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,		
	IE,	IS, I	T, LI,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK, TR		
CN 19	989455		A		2007	0627		CN 2	005-	8002	4529		2	0050711		
JP 20	0085067	49	T		2008	0306		JP 2	007-	5219	39		2	0050711		
US 20	0080085	458	A1		2008	0410		US 2	007-	6326	87		2	0070117		
IN 20	007CN00	237	A		2007	0824		IN 2	007-0	CN23	7		2	0070119		
KR 20	0070341	15	A		2007	0327		KR 2	007-	7037	21		2	0070215		
PRIORITY A	APPLN.						EP 2	004-	1034	53	I	A 2	0040720			

WO 2005-EP53296 W 20050711

OTHER SOURCE(S): MARPAT 144:180783

ED Entered STN: 27 Jan 2006

G.

- AB The invention pertain to novel photoacid generator compds. ArlC(:NOR1)CR2X2, I or II [R] = Cl-Cla-alkylsulfonyl or phenylsulfonyl, phenyl-Cl-a-alkylsulfonyl, naphthylsulfonyl, anthracylsulfonyl or phenanthrylsulfonyl etc.; R3 = phenylenedisulfonyl, naphthylenedisulfonyl, diphenylenedisulfonyl, or oxydiphenylenedisulfonyl etc.; R2 is halogen or Cl-lo-haloalkyl; X is halogen; Arl = biphenylyl or fluorenyl, or is substituted naphthyl etc.; Ar2 = heteroarylene, optionally substituted]. The photoacid generator can be used in pos. photoresist.
- IT 86-73-7, Fluorene
 - (oxime derivs. and the use thereof as latent acids)
- RN 86-73-7 HCAPLUS
- CN 9H-Fluorene (CA INDEX NAME)



- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 67
- ST oxime deriv photoacid generator pos photoresist
- IT Positive photoresists
 - (oxime derivs, and the use thereof as latent acids)
- IT 86-73-7, Fluorene 92-94-4, p-Terphenyl 98-59-9, p-Toluenesulfonyl chloride 5470-11-1, Hydroxyammonium chloride 41405-35-0

(oxime derivs, and the use thereof as latent acids)

L40 ANSWER 12 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2005:960139 HCAPLUS Full-text

DOCUMENT NUMBER: 143:275607

TITLE: 9,9-diphenylfluorenes, and photosensitizers containing them, and photoresists

showing good visible light transparency

showing good visible light transparency INVENTOR(S): Murase, Hiroaki; Sakamoto, Hironori; Yamada, Mitsuaki; Morita, Takayuki; Kitano, Satoshi;

Hosomi, Tetsuya

PATENT ASSIGNEE(S): Osaka Gas Co., Ltd., Japan; Nagase Chemtex Corp.

SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.

Т

CODEN: JKXXAF

DOCUMENT TYPE: Patent LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

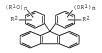
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE JP 2005232112 Α 20050902 JP 2004-45541 20040223 KR 2006043055 Α 20060515 KR 2005-14427 20050222 PRIORITY APPLN. INFO.: JP 2004-45541 A 20040223

OTHER SOURCE(S): MARPAT 143:275607

ED Entered STN: 02 Sep 2005

GI



- AB The diphenylfluorenes are I (R1 = H, quinonediazidosulfonyl; ≥1 of R1 = quinonediazidosulfonyl; R2 = H, C1-6 alkyl; n = 2, 3). The photoresists, preferably pos.-working, contain alkali-soluble resins and photosensitizers containing I produce images showing good heat and chemical resistance.
 - IT 86-73-7, Fluorene

(diphenylfluorenes bearing quinonediazidosulfonyloxy groups as photosensitizers for pos.-working photoresists)

- RN 86-73-7 HCAPLUS
- CN 9H-Fluorene (CA INDEX NAME)



- IC ICM C07C309-76
- ICS C08K005-41; C08L101-00; G03F007-022; G03F007-038; H01L021-027
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- Section cross-reference(s): 25, 38
- ST quinonediazidosulfonyloxy diphenylfluorene photosensitizer pos photosesist
- IT Positive photoresists

(diphenylfluorenes bearing quinonediazidosulfonyloxy groups as photosensitizers for pos.-working photosesists)

IT Aminoplasts

Epoxy resins, uses

(diphenylfluorenes bearing quinonediazidosulfonyloxy groups as photosensitizers for pos.-working photoresists)

IT Phenolic resins, uses

(novolak; diphenylfluorenes bearing quinonediazidosulfonyloxy groups as photosensitizers for pos.-working photoresists)

IT Catalysts

(photochem.; diphenylfluorenes bearing quinonediazidosulfonyloxy groups as photosensitizers for pos.-working photorexists)

IT 863658-55-3P 863658-56-4P

(diphenylfluorenes bearing quinonediazidosulfonyloxy groups as photosensitizers for pos.-working photosesists)

IIT 351521-78-3P, 9,9-Bis(3',4'-dihydroxyphenyl)fluorene 848873-54-1P
 (diphenylfluorenes bearing quinonediazidosulfonyloxy groups as
 photosensitizers for pos.-working photoresists)

IT 86-73-7, Fluorene 87-66-1, Pyrogallol 120-80-9, Catechol,

reactions 3770-97-6, 1,2-Naphthoquinonediazido-5-sulfonyl chloride (diphenylfluorenes bearing quinonediazidosulfonyloxy groups as photosensitisers for pos.-working photoresitis

T 9003-08-1, Nikalac MW 100LM 58141-48-3, o-Cresol-m-cresol-formaldehyde copolymer

3101
(diphenylfluorenes bearing quinonediazidosulfonyloxy groups as photosensitizers for pos.-working photoresists)

L40 ANSWER 13 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:117761 HCAPLUS Full-text

DOCUMENT NUMBER: 140:171933

TITLE: Polycyclic aromatic hydrocarbons as

electroluminescent substances for organic

electroluminescent devices

INVENTOR(S): Ishida, Tsutomu; Shimamura, Takehiko; Tanabe,

Yoshimitsu; Totani, Yoshiyuki; Nakatsuka,

125370-98-1, Techmore VG

Masakatsu

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF Patent

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004043349	A	20040212	JP 2002-202163	20020711
PRIORITY APPLN. INFO.:			JP 2002-202163	20020711

OTHER SOURCE(S): MARPAT 140:171933

ED Entered STN: 13 Feb 2004

G1

AB The hydrocarbons, having direct linkages between fluorenes and polycyclic aromatic groups other than anthracenes, are X1FljalkF21A2mF3N2, I, or II (A1, A2, A21, A22, A31 = divalent polycyclic aromatic group; F1-F3 = fluorenediyl; R21, R22, R31-R34 = H, alkyl, aryl, aralkyl; X1, X2, X21-X26, X301-X314 = H, halo, linear or branched alkyl, cycloalkyl, etc.; A1, A2, A31 ≠ anthracenediyl; X1, X2, A21, A22 ≠ anthryl; X21-X26, X301-X314, R21, R22, R31-R34 ≠ fluorenyl, polycyclic aromatic group; j, m, n = 0, 1; k, l = 1, 2). The devices having emitter layers containing the hydrocarbons as hosts or dopants show high luminescence efficiency and long service life.

IT 654664-47-8P

(hydrocarbons having direct linkages between fluorenes and polycyclic aromatic groups as hosts or dopants for emitter layers in organic electroluminescent devices)

RN 654664-47-8 HCAPLUS

CN 9H-Fluorene, 2,7-bis[3,6-bis(1,1-dimethylethyl)-1-naphthalenyl]-9,9-dimethyl- (CA INDEX NAME)

IC ICM C07C013-547 ICS C07C013-62; C07C013-66; C07C211-57; C07C211-61; C09K011-06; H05B033-14

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 25

653590-49-9P 653590-65-9P 653590-82-0P 653599-36-1P 653599-38-3P 653599-45-2P 653599-55-4P 654664-36-5P 654664-37-6P 654664-38-7P 654664-39-8P 654664-40-1P 654664-41-2P 654664-43-4P 654664-44-5P 654664-45-6P 654664-46-7P 654664-47-3P 654664-48-9P 654664-49-0P 654664-50-3P 654664-51-4P 654664-52-5P 654664-53-6P 654664-54-7P 654664-55-8P 654664-56-9P 654664-57-0P 654664-58-1P 654664-59-2P 654664-60-5P 654664-61-6P 654664-62-7P

(hydrocarbons having direct linkages between fluorenes and polycyclic aromatic groups as hosts or dopants for emitter layers in organic electroluminescent devices)

L40 ANSWER 14 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2004:117590 HCAPLUS Full-text

DOCUMENT NUMBER: 140:154552

TITLE: Optical recording medium for blue light-emitting

semiconductor laser
INVENTOR(S): Ishida, Tsutomu: Sa

Ishida, Tsutomu; Saito, Yasunori; Shiozaki, Hiroyuki; Ogiso, Akira; Tsukahara, Hiroshi; Shimamura, Takehiko; Tanabe, Yoshimitsu; Totani,

Yoshiyuki; Nakatsuka, Masakatsu

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan

10/531,208

SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004042485	A	20040212	JP 2002-204170	20020712
PRIORITY APPLN. INFO.:			JP 2002-204170	20020712

OTHER SOURCE(S): MARPAT 140:154552

ED Entered STN: 13 Feb 2004

AB The recording medium has ≥1 layer containing ≥1 hydrocarbon directly linked with fluorenes and condensed polycyclic aromatic ring. The medium is capable of recording and regenerating of information under 300-500 nm laser, e.g., blue-violet GaN laser diode. The hydrocarbons themselves are also claimed.

IT 653599-39-4 653599-49-6 653599-57-6

(optical recording medium containing fluorene-linked condensed

RN 653599-39-4 HCAPLUS

CN 9H-Fluorene, 2,7-bis[4-[2-(2-ethoxyethoxy)ethoxy]-1-naphthaleny1]-9,9dimethy1- (CA INDEX NAME)

RN 653599-49-6 HCAPLUS

CN Anthracene, 9,10-bis[7-[2-(2-ethoxyethoxy)ethoxy]-9,9-dimethyl-9H-fluoren-2-yl]- (CA INDEX NAME)

PAGE 1-B

--- CH2-- OEt

- RN 653599-57-6 HCAPLUS
- CN Anthracene, 9,9'-(9,9-dimethyl-9H-fluorene-2,7-diyl)bis[10-[7-[2-(2-ethoxyethoxy)ethoxy]-9,9-dimethyl-9H-fluoren-2-yl]- (CA INDEX NAME)

PAGE 1-A

Eto_CH2_CH2_O_CH2_CH2_O

PAGE 1-B

IC ICM B41M005-26

ICS G11B007-004; G11B007-24

CC 74-12 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 73, 76

400605-76-7 400605-92-7 400606-62-4 400606-81-7 400606-82-8 400606-84-0 400606-91-9 626236-30-4 653590-49-9 653590-65-9 653590-67-1 653590-82-0 653590-83-1 653591-68-5 653599-36-1 653599-37-2 653599-38-3 653599-39-4 653599-40-7 653599-41-8 653599-42-9 653599-43-0 653599-44-1 653599-45-2 653599-46-3 653599-47-4 653599-48-5 653599-49-6 653599-50-9 653599-51-0 653599-52-1 653599-53-2 653599-54-3 653599-55-4 653599-56-5 653599-57-6 653599-58-7 653600-44-3 653600-45-4 653600-46-5 653600-49-8

(optical recording medium containing fluorene-linked condensed polycyclic aromatic hydrocarbon for blue semiconductor laser)

L40 ANSWER 15 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 2001:449940 HCAPLUS Full-text

DOCUMENT NUMBER: 135:38968

TITLE: Microlens formed of negative photoresist

INVENTOR(S): Li, Zong-fu

PATENT ASSIGNEE(S): Intel Corporation, USA

SOURCE: U.S., 6 pp.

CODEN: USXXAM
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6249034	B1	20010619	US 1999-280434	19990329
US 6509140	B1	20030121	US 2000-709873	20001110
US 200300542	95 A1	20030320	US 2002-284929	20021031
US 6646808	B2	20031111		
PRIORITY APPLN. I	NFO.:		US 1999-280434	A3 19990329
			US 2000-709873	A3 20001110

ED Entered STN: 21 Jun 2001

AB An imaging array is described which comprises a photosensitive element with a passivation layer over it, a microlens over the layer, and a scratch

protection layer formed of neg. photoretist over the passivation layer in areas where there are no microlenses. Neg. photoresists with high thermal stability and high transparency, particularly, epoxy acrylates having the fluorene moiety, have desirable characteristics.

IT 86-73-7D, Fluorene, derivs., polymers

(imaging array containing microlens formed of neg. photoresist

RN 86-73-7 HCAPLUS

CN 9H-Fluorene (CA INDEX NAME)



TC TCM H01L031-0232

INCL 257432000

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic

and Other Reprographic Processes) Section cross-reference(s): 42, 73

ST imaging array microlens neg photoresist; epoxy acrylate fluorene neg photoresist imaging array microlens

IT Epoxy resins, processes

(acrylates; imaging array containing microlens formed of neg. photoresist)

IT Optical imaging devices

(arrays; imaging array containing microlens formed of neg.

photoresist)
IT Microlenses

Negative photoresists

(imaging array containing microlens formed of neg. photoresist

IT 86-73-7D, Fluorene, derivs., polymers

(imaging array containing microlens formed of neg. photoresist

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR

THIS RECORD. ALL CITATIONS AVAILABLE IN THE

L40 ANSWER 16 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:271577 HCAPLUS Full-text

DOCUMENT NUMBER: 130:289209

TITLE: Polyimide composition for positive

Patent

photoxesist

SOURCE: PCT Int. Appl., 112 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
WO 9919771	A1	19990422	WO 1998-JP4577	19981012		
W: CN, JP, KR,	US					

10/531,208

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE EP 1024407 20000802 EP 1998-947813 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI US 6627377 B1 20030930 US 2000-529382 20000626 PRIORITY APPLN. INFO.: JP 1997-315781 A 19971013 JP 1997-320266 A 19971016 JP 1997-353987 A 19971117 JP 1997-353988 A 19971117 JP 1997-363044 A 19971125 JP 1997-363045 A 19971125 JP 1997-363378 A 19971126 JP 1997-365491 A 19971202 JP 1997-370187 A 19971222 JP 1998-31933 A 19980105

Entered STN: 03 May 1999

AB A photosensitive polyimide composition is soluble in organic solvents, excellent in adhesiveness, heat resistance, mech. characteristics and flexibility, and is capable of exhibiting alkali-soluble, highly sensitive pos. photoresist characteristics upon irradiation with light. The composition comprises a photo-acid generator and a solvent soluble polyimide exhibiting pos. photosensitivity in the presence of the generator. 86-73-7, Fluorene

JP 1998-108410

JP 1997-352987

WO 1998-JP4577

A 19980316

A 19971117

W 19981012

ΙT

(polyimide composition for pos. photoresist)

RN 86-73-7 HCAPLUS

CN 9H-Fluorene (CA INDEX NAME)



- ICM G03F007-039
 - ICS G03F007-022; G03F007-004; C08L079-08; C09D179-08; C08G073-10; H05K003-28; H05K003-46; H01L021-027
- 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 35
- polyimide compn pos photoresist ST
- TT Positive photoresists

```
(polvimide composition for pos. photoresist)
Polyimides, uses
    (polvimide composition for pos. photoresist)
 15499-84-0P
    (polyimide composition for pos. photoresist)
 80180-96-7P, 3,3',4,4'-Benzophenonetetracarboxylic
 dianhydride-2,4-diaminotoluene-3,3'-dimethoxy-4,4'-diaminobiphenyl
 copolymer 87182-96-5P, 2,2-Bis[4-(4-
 aminophenoxy)phenyllhexafluoropropane-4,4'-[2,2,2-trifluoro-1-
 (trifluoromethyl)ethylidene]bis(1,2-benzenedicarboxylic acid
 dianhydride) copolymer 134096-63-2P 144279-09-4P 162735-41-3P
 177190-29-3P
               177190-34-0P 186967-17-9P 222842-97-9P,
 3,4,3',4'-Biphenyltetracarboxylic acid
 dianhydride-2,2-bis[4-(4-aminophenoxy)phenyl]propane-2,3-
 diaminodiphenyl ether copolymer 222843-01-8P 222843-06-3P,
 3.4.3'.4'-Biphenvltetracarboxvlic acid
 dianhydride-3,4,3',4'-benzophenonetetracarboxylic acid
 dianhydride-2,4-diaminotoluene-diaminosiloxane-3,4-diaminodiphenyl
 ether-2,2-bis[4-(4-aminophenoxy)phenyl]hexafluoropropane block
           222843-27-8P, m-BAPS-3,4,3',4'-benzophenonetetracarboxylic
 copolymer
 acid dianhydride-9,9-bis(4-aminophenyl)fluorene-3,4,3',4'-
 Biphenyltetracarboxylic acid dianhydride-3,5-diaminobenzoic acid block
 copolymer
            222843-32-5P
                          222843-36-9P,
 3, 4, 3', 4'-Benzophenonetetracarboxylic Acid
 Dianhydride-4,4'-diaminodiphenylsulfide-3,4,3',4'-biphenyl
 tetracarboxylic Acid Dianhydride-3,3'-dihydrooxybenzidine-m-BAPS block
 copolymer 222843-50-7P 222843-56-3P 222843-63-2P 222843-70-1P
 222843-77-8P 222843-82-5P 222843-88-1P 222843-94-9P
 222843-98-3P 222844-05-5P 222844-10-2P 222844-17-9P
 222844-25-9P 222844-32-8P 222844-44-2P 222844-51-1P
 222844-59-9P 222844-67-9P 222844-73-7P,
 3,3',4,4'-Biphenyltetracarboxylic dianhydride; diaminosilane;
 y-valerolactone; 3,4,3',4'-benzophenonetetracarboxylic
 dianhydride; 3,3'-dihydroxy-4,4'-diaminobiphenyl; 3,4'-diaminodiphenyl
 ether block copolymer 222844-82-8P 222844-87-3P 222844-93-1P
 222844-96-4P 222845-03-6P
                              222845-07-0P,
 3,3',4,4'-Benzophenonetetracarboxvlic acid
 dianhydride-3,3'-dinitro-4,4'-diaminodiphenyl-bis[4-(3-
 Aminophenyl)phenyl]sulfone copolymer 222845-11-6P 222845-17-2P
 222845-23-0P
              222845-26-3P 222845-32-1P 222845-38-7P,
 3.3',4.4'-Biphenvltetracarboxvlic acid
 anhydride-1,5-diaminoanthraquinone-2,2-bis[4-(3-
 aminophenoxy)phenyl]propane copolymer 222845-43-4P 222845-53-6P
 222845-58-1P 222845-63-8P 222845-68-3P,
 3,3',4,4'-Benzophenonetetracarboxylic acid
 dianhydride-1, 4-bis(3-aminopropyl)piperazine-bis[4-(3-
 aminophenoxy)phenyl]sulfone copolymer 222845-73-0P 222845-77-4P
 222845-83-2P 222845-89-8P 222845-95-6P 222846-01-7P
 222846-08-4P
              222846-13-1P 222846-18-6P 222846-23-3P,
 3,3',4,4'-Biphenyltetracarboxylic acid
 dianhydride-bis-4-(3-aminophenoxy)phenylsulfone-2,2-bis-[4-(3-
 aminophenoxy)phenyl]hexafluoropropane copolymer 222846-30-2P
 222846-54-0P
              222846-63-1P 222846-79-9P 222846-83-5P
 222846-88-0P, 3,4,3',4'-Biphenyltetracarboxylic acid
 dianhydride-2,2-ditrifluoromethylbendzidine-2,2-bis[4-(4-
 aminophenoxy)phenyl]propane-3,5-diaminobenzoic acid block copolymer
 222846-93-7P
    (polyimide composition for pos. photoresist)
86-73-7, Fluorene
    (polyimide composition for pos. photoresist)
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IIT 83803-86-5 222843-16-5, m-BAPS-3,3'-dimethylbenzidine-4,4'-[2,2,2-trifluoro-1-(trifluoromethyl)ethylidene]bis(1,2-benzenedicarboxylic acid dianhydride) copolymer 222843-21-2,

m-BAPS-bicyclo(2,2,2)-octa-7-ene-2,3,5,6-tetracarboxylic acid dianhydride-pyromellitic acid dianhydride copolymer 222843-41-

2,2-Bis[4-(4-aminophenoxy)phenyl]propane-3,4,3',4'-

Biphenyltetracarboxylic dianhydride-3,5-diaminobenzoic

acid-pyromellitic acid dianhydride-2,2'-bis(trifluoromethyl) benzidine block copolymer

(polyimide composition for pos. photoresist)

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L40 ANSWER 17 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1997:553940 HCAPLUS Full-text

DOCUMENT NUMBER: 127:227437

ORIGINAL REFERENCE NO.: 127:44223a,44226a

TITLE: Polymer and resist material

INVENTOR(S): Urano, Fumiyoshi; Fujie, Hirotoshi; Oono, Keiji
PATENT ASSIGNEE(S): Wako Pure Chemical Industries, Ltd., Japan

SOURCE: Eur. Pat. Appl., 46 pp.

CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

F

	PATENT NO.				KIND DATE			APPLICATION NO.					DA:	ΓE						
	EP	7892	79			A1	-	1997	0813		EP	199	6-3	3091	41			199	96121	.3
	EΡ	7892	79			B1		2001	0321											
	EΡ	7892	79			B2		2004	1208											
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FI,	FR,	GE	3, 0	R,	ΙE,	IT,	LI,	LU	, 1	ИС,	
			NL,	PT,	SE															
	ΑT	1999	85			T		2001	0415		ΑT	199	6-3	3091	41			199	96121	13
	US	6033	826			A		2000	0307		US	199	6-	7695	30			199	96121	19
	CN	1159	453			A		1997	0917		CN	199	6-1	1231	57			199	96122	20
	CN	1145	078			C		2004	0407											
	TW	4407	44			В		2001	0616		TW	199	6-8	3511	5781			199	96122	20
	JP	1005	3621			A		1998	0224		JP	199	7-3	3557	2			199	97020	4
	JΡ	3724	098			B2		2005	1207											
PRIOR	ITY	APP	LN.	INFO	. :						JP	199	6-4	1795	5		A	199	96020	9
											JP	199	6-1	1683	87		A	199	96060	7

OTHER SOURCE(S): MARPAT 127:227437

(resist materials containing hydroxystyrene copolymer containing acetal or ketal groups and)

ED Entered STN: 30 Aug 1997

AB A copolymer of hydroxystyrene containing an acetal or ketal group which can easily be eliminated in the presence of an acid in the mol. and having a very narrow mol. weight distribution gives a resist material suitable for forming ultrafine patterns excellent in resolution, heat resistance, mask linearity, and other properties without causing problems of delay time and the like.

IT 96-73-70, Fluorene, azo derivs

RN 86-73-7 HCAPLUS

CN 9H-Fluorene (CA INDEX NAME)



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ICM G03F007-039
    ICS G03F007-004; C08F212-14; C08F012-14; C08F112-14
CC
    74-5 (Radiation Chemistry, Photochemistry, and Photographic
    and Other Reprographic Processes)
ŞΤ
    photoresist hydroxystyrene copolymer acetal group
ΙT
    Photoresists
        (hydroxystyrene copolymers containing acetal or ketal groups for)
ΙT
    69-72-7, Salicylic acid, uses 86-73-70, Fluorene, azo derivs
                                     131-55-5,
    89-73-6, Salicylhydroxamic acid
    2,2',4,4'-Tetrahydroxybenzophenone 577-56-0, o-Acetylbenzoic acid
    758-96-3, N.N-Dimethylpropionamide
                                        832-80-4, 9-Diazofluorene
    1116-76-3, Trioctylamine 1886-74-4 2321-07-5, Fluorescein
    4387-82-0, N.N-Dimethylolacetamide
                                        7509-44-6.
    9-Diazo-10-phenanthrone 9004-95-9, Polyoxyethylene cetyl ether
                 28322-50-1 66003-78-9, Triphenylsulfonium
    14159-45-6
    trifluoromethanesulfonate
                                138529-81-4,
                                         138529-83-6
    Bis(cyclohexylsulfonyl)diazomethane
                                                       138529-84-7
    138529-91-6 171429-57-5 177034-79-6 194996-92-4
        (resist materials containing hydroxystyrene copolymer containing acetal or
       ketal groups and)
L40 ANSWER 18 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER:
                        1991:682049 HCAPLUS Full-text
DOCUMENT NUMBER:
                        115:282049
ORIGINAL REFERENCE NO.: 115:47913a,47916a
TITLE:
                        Polycyclic aromatic organosilica gels and azo dyes
                        based on them
AUTHOR(S):
                        Mkheidze, N. P.; Apkhazava, P. N.; Chirakadze, G.
CORPORATE SOURCE:
                        Gruz. Tekh. Inst., Tbilisi, USSR
SOURCE .
                        Izvestiva Akademii Nauk Gruzinskoi SSR, Seriva
                        Khimicheskaya (1990), 16(2), 98-103
                        CODEN: IGSKDH: ISSN: 0132-6074
DOCUMENT TYPE:
                        Journal
LANGUAGE:
                        Russian
OTHER SOURCE(S):
                        CASREACT 115:282049
   Entered STN: 27 Dec 1991
     New organosilica gels, containing fragments of fluorene (I) and fluoranthene
     (II) chemical bonded with atoms of silicon of the inorq. matrix, were
     synthesized. Consecutive reactions were conducted on the gels to give diazo
     components. New azo dyes were synthesized by coupling of \beta-naphthol, H-acid,
     indole, m-aminophenol, fluorescein and naphthionic acid with the diazo
     components. The obtained azo dyes were characterized by color variety, light
     resistance, and fastness to wet treatment. The quantity of immobilized
     fragments on the surface of silica gel was equal to 5.11 (I) and 1.73% (II).
     The structure of the grafted azo dyes was confirmed by UV spectra.
    86-73-7, Fluorene
       (nitration of)
    86-73-7 HCAPLUS
RN
CN
    9H-Fluorene (CA INDEX NAME)
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CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

IT 86-73-7, Fluorene 206-44-0, Fluoranthene (nitration of)

L40 ANSWER 19 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1989:544117 HCAPLUS Full-text

DOCUMENT NUMBER: 111:144117

ORIGINAL REFERENCE NO.: 111:23909a,23912a

TITLE: Heat-resistant photosensitive polymer compositions

INVENTOR(S): Kataoka, Fumio; Shoji, Fusaji; Tanaka, Jun; Yamazaki, Tetsuya; Kojima, Mitsumasa

PATENT ASSIGNEE(S): Hitachi, Ltd., Japan; Hitachi Chemical Co., Ltd.

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
JP 63318549	A	19881227	JP 1987-154757	19870622	
JP 06046302	В	19940615			
PRIORITY APPLN. INFO.:			JP 1987-154757	19870622	

- ED Entered STN: 14 Oct 1989
- AB The neg.-working title compns. contain 100 parts of a polymer of the repeating unit -COR1(CO2R3)(CO2R4)CONRP2(XY)nNH-(R1 = C≥4 tetravalent organic group; R2 = a tri- or tetravalent organic group containing an aromatic ring; R3, R4 = C≤10 organic group; Y = a photosensitive group; X = an organic group, O, NH; n = 1, 2) and 0.1-30 parts of a photopolymn. initiator, photocrosslinker, and/or photosensitizer.
- IT 86-73-7, 9H-Fluorene
 - (photoresists containing, heat-resistant)
- RN 86-73-7 HCAPLUS
- CN 9H-Fluorene (CA INDEX NAME)



- IC ICM G03C001-71
 - ICS C08G073-10
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST polyamic acid neg working photoresist; photocrosslinker neg working photoresist; photoinitiator neg working

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10/531.208
     photoresist; photosensitizer neg working photoresist
     ; polyimide neg working photoresist
   Polvamic acids
      (photoresists containing, heat-resistant)
    Heat-resistant materials
IT
       (polyamic acid photoresists)
    Crosslinking catalysts
       (photochem., for polyamic acid photoresists)
     66-77-3, 1-Naphthaldehyde 68-11-1, uses and miscellaneous 79-42-5
     82-05-3, 7H-Benz[de]anthracen-7-one 86-73-7, 9H-Fluorene
     86-93-1 90-44-8, Anthrone 90-93-7,
     Bis-4,4'-diethylaminobenzophenone 90-94-8, Michler's ketone
     119-61-9, Benzophenone, uses and miscellaneous 126-58-9,
     Dipentaerythritol 260-94-6, Acridine 492-22-8,
     9H-Thioxanthen-9-one 574-09-4, Benzoin ethyl ether 602-87-9,
     5-Nitroacenaphthene 607-57-8, 2-Nitrofluorene 641-13-4,
     Dibenzo[def,mno]chrvsene-6,12-dione 703-80-0 1785-51-9,
     Pyrene-1,6-quinone 2498-66-0, 1,2-Benzoanthraquinone 3508-73-4
     5284-79-7 5960-69-0 6652-28-4 7575-23-7, Pentaervthritol
     tetra(3-mercaptopropionate) 10193-98-3 10193-99-4, Pentaerythritol
     tetrathioglycolate 10287-54-4 10312-58-0, Trimethylolethane
     tris(3-mercaptopropionate) 20237-98-3,
     2,6-Bis(4-azidobenzal)cyclohexanone 21245-01-2 22504-50-3,
     Ethylene glycol bis(3-mercaptopropionate) 33007-83-9,
     Trimethylolpropane tris(3-mercaptopropionate) 35210-50-5
     35460-17-4 37265-25-1, Ethylene glycol thioglycolate 42397-65-9,
     1,8-Dinitropyrene 42759-78-4 42759-79-5 49600-94-4 49600-95-5
     \begin{array}{lll} 63021-86-3, & Nitropyrene \\ 85179-71-1 & 86776-28-5 \end{array} & \begin{array}{lll} 80208-77-1, & Trimethylolpropane \\ 91528-47-1, & Ethyl \\ \end{array} dimethylaminobenzoate \end{array}
     95543-55-8 122638-13-5 122638-14-6 122638-15-7 122638-16-8
     122644-00-2 122644-02-4 122644-03-5 122644-05-7 122644-54-6
     122644-55-7 122644-56-8 122659-00-1 122659-01-2 122659-42-1
     122681-83-8 122694-43-3 122727-61-1
        (photoresists containing, heat-resistant)
L40 ANSWER 20 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 1988:519706 HCAPLUS Full-text
DOCUMENT NUMBER:
                        109:119706
ORIGINAL REFERENCE NO.: 109:19789a,19792a
TITLE:
                         Photohardenable layer material, method for its
                         production, and printed circuit production
                        therefrom
                        Nakazaki, Nobuo; Ai, Hideo; Mivao, Manabu
PATENT ASSIGNEE(S):
                        Asahi Chemical Industry Co., Ltd., Japan
SOURCE:
```

INVENTOR(S):

Ger. Offen., 28 pp. CODEN: GWXXBX

DOCUMENT TYPE: Patent German

LANGUAGE: FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	TENT NO.	KIND	DATE	API	PLICATION NO.	DATE
DE	3732801	A1	19880407	DE	1987-3732801	19870929
DE	3732801	C2	19930304			
JP	63085538	A	19880416	JP	1986-231058	19860929
JP	01013138	A	19890118	JP	1987-169507	19870707
JP	01014262	A	19890118	JP	1987-169508	19870707
US	4839261	A	19890613	US	1987-96479	19870915
GB	2196639	A	19880505	GB	1987-21966	19870918

GB 2196639	В	19900725			
FR 2604534	A1	19880401	FR 1987-13384		19870928
FR 2604534 PRIORITY APPLN. INFO.:	В1	19911018	JP 1986-231058	А	19860929
			TD 1003 160503		10030303
			JP 1987-169507	A	19870707
			JP 1987-169508	A	19870707

ED Entered STN: 01 Oct 1988

GI

- AB A photohardenable layer material, which can be used for the production of printed circuits on printing plates, consists of a transparent support and a photohardenable layer containing 100 parts of a compound with repeating units of the formula I (R = vinyl, epoxy, or episulfide group; R1 = H, C1-6 alkyl, or halogen; and R and R1 are in the ortho, meta, or para position to the C atom of the main chain) and CWXCYZ [W, X, Y, and Z = H, halogen, CN, (un) substituted alkyl or aryl, (un) substituted ether or ester, NO2, Sicontaining-group, or a heterocyclic ring-substituted group), and 5-1000 parts of a compound that is compatible with the above-mentioned compound and has a double bond-containing group and a viscosity of 0.0001-50 Pa-s at 20°. A mixture containing Aronix M-305, epoxidized p-divinvlbenzene-2vinylnaphthalene copolymer, benzophenone, Michler's ketones, and MEK was prepared was coated on a PET film, dried, pressed upon the Cu surface of a Cuclad glass fiber-epoxy resin laminate, imagewise exposed, the PET film stripped off, and the image developed with 1,1,1-trichloroethane to give a good image.
- RN 86-73-7 HCAPLUS
- CN 9H-Fluorene (CA INDEX NAME)

- IC ICM G03F007-10
 - ICS G03C001-72; H01L021-312; C08F002-48; B32B015-08; B32B027-06
- ICA H05K003-00; C08J003-28; C08J003-24
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST dry film photoimaging material; photoresist dry film; printing plate dry film photoimaging

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IT Electric circuits
```

(printed, dry-film photoresists for fabrication of)

T 86-73-7, Fluorene 90-94-8, Michler's ketone 119-61-9,

Benzophenone, uses and miscellaneous 134-85-0, 4-Chlorobenzophenone 603-35-0, Triphenylphosphine, uses and miscellaneous 3524-68-3

9003-53-6 9003-55-8 9011-14-7 10287-53-3, Ethyl

4-(dimethylamino)benzoate 21908-85-0 24650-42-8 61722-28-9, BP 4PA 68224-34-0, D-330 75980-60-8,

2,4,6-Trimethylbenzoyldiphenylphosphine oxide 95543-55-8, Isopropyl-4-(dimethylamino)benzoate 95567-09-2, Aronix 8100

95971-30-5, 2,4-Diisopropylthioxanthone 116111-51-4 116134-95-3 116237-19-5

(dry-film photoresists containing)

II 62-56-6DP, Thiourea, reaction products with styrene-vinylstyrene oxide copolymers 26101-54-2DP, reaction products with thiourea 26101-54-2P 103945-31-9P 105430-21-5P 107810-72-0P

107810-73-1P 114975-34-7P 116111-49-0P 116111-50-3P 116111-70-7P 116134-85-1P 116134-90-8P 116134-91-9P

116134-92-0DP, epoxidized 116134-93-1P 116134-94-2P 116134-96-4P 116237-20-8P 116237-21-9P 116266-04-7P

(preparation and dry-film photoresists containing)

L40 ANSWER 21 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1988:483443 HCAPLUS Full-text

DOCUMENT NUMBER: 109:83443

ORIGINAL REFERENCE NO.: 109:13783a,13786a

TITLE: Photopolymerizing laminates for printed circuits

INVENTOR(S): Ai, Hideo; Ikeda, Akihiko; Sato, Jiro

PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan SOURCE: Jpn. Kokai Tokkvo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE: LANGUAGE:

LANGUAGE: Japanese FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
JP 61077844	A	19860421	JP 1984-199452	19840926	
JP 05050737	В	19930729			
PRIORITY APPLN. INFO.:			JP 1984-199452	19840926	

ED Entered STN: 02 Sep 1988 GI

- The photopolymerizable resin layer of the title laminate is composed of (1) a AR vinyl (co)polymer binder 5-95, (2) a photopolymerizable compound selected from RY(NHCO2ZCONHY)nR, RmW, and Rm-1WNHCO2ZCONHWRm-1 [R = CH2:CR1CO2XCHR2O2CNH; n ≥ 0; m = 3-10; R1 = H, Me; X = C1-8 divalent aliphatic hydrocarbon moiety, (CH2CHR30)pCH2, (CH2)qO2CC6H4CO2(CH2)r; R2 = C1-6 alkyl, CH2OR4; R3 = C1-4 alkyl; R4 = Ph, aryl, C1-6 alkyl; Y = C2-16 divalent hydrocarbon moiety; Z = (CH2)to, (CH2CHR3O)x, CH2CMe2CH2O, CHR5CH2OZ1CH2CHR5O; R5 = CH2:CR1CO2CH2; Z1 = (CH2)to, (CH2CHR10)x, CH2CMe2CH20, COC6H4CO2, CH2CHR10-p-C6H4CMe2-p-C6H4OCHR1CH2O; W = I; W1 = II, III, IV, V; W2 = trivalent C3-10 hydrocarbon moiety; p = 1-10; q, r = 1-4; t = 2-10; x = 1-30; s = 1-5) 5-95, and (3) a photopolymn. initiator 0.01-30 weight%. The title laminate is especially useful for fabrication of printed circuit boards. Thus, a poly(ethylene terephthalate) film was coated with a photosensitive resin composition containing Bu acrylate-Me methacrylate copolymer, a hexamethylene diisocvanate-2-hydroxypropyl acrylate adduct, benzophenone, Michler's ketone, Dia Resin Blue P, benzotriazole, and p-methoxyphenol, and the film was laminated on a Cu-laminated glass fiber-enforced epoxy resin plate. Imagewise exposure from the film side and subsequent development of the resist layer gave high quality resist pattern on the Cu laminated board.
- ΙT 86-73-7
- (photoresist compns. containing, dry-film type)
- 86-73-7 HCAPLUS RN
- CN 9H-Fluorene (CA INDEX NAME)



- IC ICM G03C001-68
- ICS G03C001-00; G03F007-10
- ICA C08F002-48; C08F299-06
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- Section cross-reference(s): 76 ST
- photoresist laminate printed circuit board; urethane prepolymer photoresist
- Electric circuits
- (printed, photoresist laminates for preparation of) 81-48-1, Dia Resin Blue-G 86-73-7 90-94-8,
- 4,4'-Bis(dimethylamino)benzophenone 95-14-7, Benzotriazole 101-68-8D, Diphenylmethane diisocyanate, adducts with hydroxypropyl acrylate 119-61-9, Benzophenone, uses and miscellaneous 4-Chlorobenzophenone 150-76-5, p-Methoxyphenol 603-35-0, Triphenvlphosphine, uses and miscellaneous 822-06-0D, Hexamethylene diisocyanate, adducts with hydroxypropyl acrylate 999-61-1D, 2-Hydroxypropyl acrylate, reaction products with diisocyanates 2475-44-7 3524-68-3, Aronix M-305 4098-71-9D, adducts with
 - hydroxypropyl acrylate 9003-53-6, Styron GP685 9011-14-7, Delpet 70H 10287-53-3, Ethyl 4-dimethylaminobenzoate 16969-10-1D, 2-Hydroxy-3-phenoxypropyl acrylate, adducts with mexamethylene diisocyanate 21908-85-0 24650-42-8 25322-68-3D, Polyethylene

glycol, adducts with hexamethylene diisocvanate and hydroxypropyl acrylate 25852-37-3, Butyl acrylate-methyl methacrylate copolymer 26471-62-5D, Tolylene diisocyanate, adducts with hydroxypropyl acrylate 37293-38-2D, Coronate HL, adducts with hydroxypropyl 39278-79-0D, Coronate L, adducts with hydroxypropylacrylate acrvlate 39420-45-6D, adducts with hexamethylene diisocyanate 60506-81-2 61722-28-9 68224-34-0, D-330 72928-42-8 72928-42-8D, reaction products with tolylene diisocyanate-hydroxypropyl acrylate adduct 74315-89-2, Dia Resin Green-C 81544-19-6D, adducts with 86280-89-9 95523-89-0, Viscoat 3700 hydroxypropyl acrylate 95543-55-8, Isopropyl 4-dimethylaminobenzoate 95567-09-2, Aronix 95567-11-6, Asaflex AFX-810 95567-20-7, Dia Resin Blue P 95567-23-0, Delpet CR-1 95567-50-3, R-526 95567-61-6, Viscoat 823 95971-30-5, 2,4-Diisopropylthioxanthone 108251-12-3, Aronix M-1200 (photoresist compns. containing, dry-film type)

L40 ANSWER 22 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1987:41634 HCAPLUS Full-text

DOCUMENT NUMBER: 106:41634

ORIGINAL REFERENCE NO.: 106:6805a,6808a

TITLE: Fluorene-containing compounds and negative

photoresist compositions therefrom INVENTOR(S): Guillet, James E.; Redpath, Anthony E.

PATENT ASSIGNEE(S): Ecoplastics Ltd., Can.

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
US 4618566	A	19861021	US 1984-666592	19841031		
US 4663412	A	19870505	US 1986-881423	19860702		
PRIORITY APPLN. INFO.:			US 1984-666592 A3	19841031		

ED Entered STN: 07 Feb 1987 GI

$$\mathbb{R}^{\mathbb{R}^1}$$

AB Neg. photoresists, sensitive in the 200-300 nm wavelength region, were obtained from crosslinked polymers containing fluorene derivs. I (R-R2 = H, C1-6 radical, CH2:CMeCO2CH2 or CH2:CMeCO2CHMe; R3, R4 = H, alkyl). Hydrogenation of 2e-acetylfluorene gave (2-fluorenyl)ethanol, which, on dehydration, gave 2-vinylfluorene (II). II was then polymerized and tested for UV degradation The polymer crosslinked upon a 60 s exposure to a 500 W Xe lamp.

- IT 86-73-75, Fluorene, derivs., polymers (photoresist from)
- RN 86-73-7 HCAPLUS
- CN 9H-Fluorene (CA INDEX NAME)



IC ICM G03C001-71

ICS G03C001-76; C08F008-00

INCL 430271000

C 74-5 (Radiation Chemistry, Photochemistry, and Photographic

and Other Reprographic Processes)

ST photoresist elec circuit fluorene deriv

IT Electric circuits

(micro-, fluorene derivative-containing polymer photoresist for fabrication of)

IT 86-73-7D, Fluorene, derivs., polymers

(photoresist from)

IT 31810-15-8P, 2-Vinyl fluorene polymer 106173-78-8P 106173-79-9P (preparation and photoresist from)

IT 10473-10-6P, 2-Vinyl fluorene 106120-02-9P

(preparation and polymerization of, for photoresist)

IT 73048-27-8P

(preparation of, for photoresist)

L40 ANSWER 23 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1986:635832 HCAPLUS Full-text
DOCUMENT NUMBER: 105:235832

ORIGINAL REFERENCE NO.: 105:37941a,37944a

TITLE: New photopolymerization resin laminates

INVENTOR(S): Ikeda, Akihiko; Matsuoka, Yoshio; Ai, Hideo PATENT ASSIGNEE(S): Asahi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 61089846	A	19860508	JP 1984-211400	19841011
PRIORITY APPLN. INFO.:			JP 1984-211400	19841011

ED Entered STN: 26 Dec 1986

G1

IT 86-73-7

(photopolymn. initiator, for dry film photoresist)

RN 86-73-7 HCAPLUS

CN 9H-Fluorene (CA INDEX NAME)



- IC ICM B32B027-00
- ICA B32B027-30; H05K003-00
- CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 76
- ST photoresist dry film elec circuit; vinyl polymer photoresist, urethane acrylate crosslinking agent photoresist
- IT Electric circuits
- (printed, dry film photoresists for fabrication of) IT -86--73--7 -90--94--8 -119--61--9 , uses and miscellaneous
- 24650-42-8 79044-56-7 95543-55-8 (photopolymn. initiator, for dry film photoresist)
- TT 3524-68-3 68224-34-0 72928-42-8 95523-89-0 (photograph composition containing)
- IT 9011-14-7 25852-37-3 95567-11-6 95567-23-0
- IT 9011-14-7 25852-37-3 95567-11-6 95567-23-0 (photoresist composition containing, as binder)
- IT 85287-01-0 85797-50-8 85798-04-5 103709-92-8 105511-11-3 105511-12-4 105511-13-5 105511-14-6 105511-15-7 105511-16-8 105511-17-9 105511-18-0 105527-18-2 105527-25-1 105567-50-8 (prepolymer, dry film photoresist composition containing vinyl

polymers and)

L40 ANSWER 24 OF 24 HCAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1976:502422 HCAPLUS Full-text

DOCUMENT NUMBER:

85:102422 ORIGINAL REFERENCE NO.: 85:16341a,16344a

TITLE:

Positive polymer resists

INVENTOR(S):

Cipstein, Edward; Moreau, Wayne M.; Need, Omar U.,

PATENT ASSIGNEE(S):

III International Business Machines Corp., USA

SOURCE: Ger. Offen., 10 pp.

CODEN: GWXXBX Patent

DOCUMENT TYPE:

German

LANGHAGE . FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
DE 2536300 PRIORITY APPLN. INFO.:	A1	19760408	DE 1975-2536300 US 1974-505595 A	19750814 19740926		

Entered STN: 12 May 1984

The depolymn. of polysulfones by light (300-600 nm) or by low-energy electron AB beams (10-30 keV, 1 + 10-7-1 coulomb/cm2) is accelerated by free radical formers (CBr4) or energy transferring agents, such as 2,4,7trinitrofluorenone. A suitable solvent for the coating is MeNO2, as developer (C1C2H4)2, and as solvent to remove the resist PhMe of 50°. Thus, the electron beam sensitivity of a polycyclopentenesulfone resist coating was increased by a factor of 5-10 by addition of 5% CBr4.

86-73-7

(sensitizer, for depolymn. of polysulfone pos. resists)

RN 86-73-7 HCAPLUS

CN 9H-Fluorene (CA INDEX NAME)



- G03F007-10
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic Processes)
- pos resist sensitization halomethane; electron resist pos sensitization; photoresist pos sensitization
- 75-52-5 86-73-7 100-01-6 103-33-3 122-39-4 129-79-3 275-51-4 507-25-5 558-13-4

(sensitizer, for depolymn, of polysulfone pos. resists)

=> D HIS NOFILE

L27

L28

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               SEL RN
    FILE 'REGISTRY' ENTERED AT 08:51:45 ON 19 NOV 2008
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               125748-07-4/BI OR 156281-11-7/BI OR 1927-95-3/BI OR
               211427-64-4/BI OR 24424-99-5/BI OR 27955-94-8/BI OR
               29654-55-5/BI OR 5001-18-3/BI OR 5292-43-3/BI OR 623-05-2/B
               I OR 65338-98-9/BI OR 683227-72-7/BI OR 683227-73-8/BI OR
               683227-74-9/BI OR 683227-75-0/BI OR 683227-76-1/BI OR
               75-07-0/BI OR 99181-50-7/BI)
               ACT LEE208/A
1.3
               STR
L4
         33354 SEA SSS FUL L3
L5
               STR L3
              4 SEA SUB=L4 SSS SAM L5
L6
             52 SEA SUB=L4 SSS FUL L5
               SAV L7 LEE208E/A
               E C13H10/MF
L8
           319 SEA ABB=ON PLU=ON C13H10/MF
               E C15H14/MF
            570 SEA ABB=ON PLU=ON C15H14/MF
L9
        129991 SEA ABB=ON PLU=ON 1839.6/RID
L10
            74 SEA ABB=ON PLU=ON (L8 OR L9) AND L10
L11
             4 SEA ABB=ON PLU=ON L11 AND 9,9-DIMETHYL?
L12
L13
             3 SEA ABB=ON PLU=ON L12 NOT T/ELS
            38 SEA ABB=ON PLU=ON L8 AND L10
L14
L15
            17 SEA ABB=ON PLU=ON L14 NOT (D OR T)/ELS
            13 SEA ABB=ON PLU=ON L15 NOT RADICAL?
L16
L17
             11 SEA ABB=ON PLU=ON L16 NOT LABEL?
               E FLUORENE/CN
L18
              1 SEA ABB=ON PLU=ON FLUORENE/CN
L19
              4 SEA SSS SAM L5
               D SCA
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            37 SEA ABB=ON PLU=ON L7
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               E C15H14O3/MF
1.21
           2648 SEA ABB=ON PLU=ON C15H14O3/MF
L22
             16 SEA ABB=ON PLU=ON L21 AND L10
               E C13H10O3/MF
L23
           873 SEA ABB=ON PLU=ON C13H10O3/MF
             6 SEA ABB=ON PLU=ON L23 AND L10
L24
L25
             1 SEA ABB=ON PLU=ON L24 AND 9H-FLUORENETRIOL
L26
             1 SEA ABB=ON PLU=ON L13 NOT RADICAL?
    FILE 'HCAPLUS' ENTERED AT 09:21:28 ON 19 NOV 2008
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13783 SEA ABB=ON PLU=ON L26 OR L25 OR L18

10/531,208

								,200					
			OR I	LIGHTRES	IST? OR	LIGH	r re	SIST?)					
L29		14	SEA	ABB=ON	PLU=ON	L28	AND	PHOTOG	3?/SC,SX				
L30		0	SEA	ABB=ON	PLU=ON	L20	AND	(PHOTO	RESIST?	OR	PHOTO	RESIST	?
			OR I	LIGHTRES	IST? OR	LIGH'	r re	SIST?)					
L31		7	SEA	ABB=ON	PLU=ON	L20	AND	PHOTOG	3?/SC,SX				
L32		37	SEA	ABB=ON	PLU=ON	L20	OR :	L30 OR	L31				
L33		51	SEA	ABB=ON	PLU=ON	L29	OR :	L32					
L34		22	SEA	ABB=ON	PLU=ON	L20	AND	RACT/E	RL				
L35		22	SEA	ABB=ON	PLU=ON	L34	AND	PREP/E	RL				
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L36		12	SEA	ABB=ON	PLU=ON	L7 1	TO!	N/ELS					
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L38		2	SEA	ABB=ON	PLU=ON	L37	AND	L31					
L39		24	SEA	ABB=ON	PLU=ON	L29	OR :	L37					
L40		24	SEA	ABB=ON	PLU=ON	L38	OR						